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My name is William Dudley. I am the chief U.S. economist for Goldman, Sachs & Co. It is my pleasure to have the opportunity to testify before the U.S. Senate Budget Committee. The views expressed in my statement are my own and do not necessarily reflect the positions or views of Goldman Sachs.

The budgetary outlook is highly uncertain, both over the next year and the next decade. However, in my view, the risks are not symmetric. Instead, they are heavily skewed to the side that the budget surpluses fall short of projections, even assuming that Congress and the Administration maintain tight control of discretionary spending.

In particular, the revenue estimates appear too optimistic for two reasons:

First, the amount of tax receipts generated for each dollar of economic activity is likely to decline, and not only because of the tax legislation that was recently enacted. Put simply, the surge in tax receipt revenue during the later half of the 1990s was not just the result of faster economic growth. It also reflected a confluence of factors such as increasing inequality in terms of income gains, a rise in the profit share of income, and a surge in capital gains tax receipts and income tax revenues generated by the soaring equity market. Most, if not all of these factors, are in the process of reversing course.

Second, the long-term growth rate of the economy may not be as high as anticipated. In particular, if the investment boom of 1999 and 2000 was based on overly optimistic assumptions of future profitability, as appears to be the case, then investment spending will not recover quickly. In that event, the pace of capital deepening will slow. That suggests that productivity growth is likely to decline from its lofty 1999-2000 pace on a longer-term basis.

Turning first to the near-term budget outlook, there are a number of reasons for concern that the Congressional Budget Office revenue projections may be overly optimistic. First, it appears that the profit share of income is falling sharply. For example, we estimate that the pre-tax profit share of GDP in 2001 will be only about 8.4% compared to 9.5% in 2000. This is important for the budgetary outlook because a dollar of profit income generates significantly more revenue than a dollar of personal income because the average tax rate on corporate income is significantly higher.

The profit share of income is declining for three reasons. First, the profit share is cyclical. When the US economy slows sharply, profits typically bear the brunt of that adjustment. Second, profits are also under pressure due to the rise in compensation costs generated by the tight labor market and rising energy prices. Third, the investment bust is leading to a sharp downturn in the profitability of information and communication technology companies.

The impact of the profit squeeze on federal tax receipts is already becoming evident. For example, estimated corporate tax payments for the June 15 tax date fell sharply, down 26.3% from a year earlier. We estimate that corporate taxes could fall about $15-20 billion short of the CBO's projection for the current fiscal year, and $20-30 billion for fiscal 2002.

Second, personal income tax receipts could also prove to be disappointing. In recent years, personal income tax receipts have been unusually strong due in large part to the strength of the US equity market.

The strong US stock market boosted income tax receipts in two ways:

1. Income was boosted by the exercise of stock options, which were a significant component of compensation, especially among high-technology firms.
2. Income was boosted by capital gains generated by the rapid appreciation of the US stock market.

Although data on options and capital gains income are not available on a timely basis, a significant shortfall could occur next spring relative both to expectations and to recent realizations. On the options side, the experience of the State of California suggests that a large drop in options-related income is likely in 2001 and 2002.

The State of California recently estimated that the exercise of stock options contributed more than $80 billion to personal income in 2000, up from about $50 billion in 1999. The State of California assumes a 37% decline in 2001 back close to its 1999 level. Even that expectation may prove to be too optimistic as it is based upon an assumption that the NASDAQ will rise sharply from its current level. The California budget revision statement notes that the NASDAQ in 1999 averaged 2800, roughly 30% above its current level.

This suggests that the shortfall in tax receipts due to a drop in options income could be as large as $40 billion. It is reasonable to assume that the total options income for the country as a whole must be at least two to three times the size registered for California. If one assumes that this options income declines by about 40% this year, that would imply a drop in such income of roughly $65-100 billion. Assuming that most of this income is taxed at the top marginal personal income tax rate, then the revenue shortfall from this source would be about $25-40 billion.

Of course, if options income were to collapse, there would be an offset in terms of higher corporate income tax receipts. That is because the exercise of the options creates an expense for the corporations that they can deduct against earnings. But with many technology firms never having been sufficiently profitable to take advantage of the options expense deduction during the boom, this offset is likely to be considerably less than one-for-one. Moreover, it presumably is already embodied in the disappointing corporate tax receipts evident for the recent June 15 tax payment date.

On the capital gains side, it appears that realizations continued to increase sharply in 2000 in response to prior rapid gains in equity prices. For example, the Investment Company Institute estimates that mutual funds paid out $345 billion in capital gains income in 2000, up more than 40% from $238 billion in 1999. Final tax settlements in the spring of 2001 came in close to the CBO's projections, suggesting that their forecast of capital gains tax receipts for 2001 of $129 billion is probably not far off the mark.

The problem is that such strong capital gains receipts appear unsustainable. Capital gains receipts rose at more than a 20% annual rate from 1996 to 2001 according to CBO estimates, as the equity market more than doubled in value over that period. But now the equity market is down more than 20% from its peak. Yet, the Congressional Budget Office has assumed only a small drop in capital gains tax receipts next year of 3%.

A reasonable view might instead be that capital gains receipts will fall back to the 1999 level of $98 billion. After all, the equity market is at roughly the same level, and the volume of unrealized gains has diminished since 1999 given the large capital gains realized in 2000. This would imply a shortfall of $27 billion relative to the CBO's January projection.

Taking all three factors together--corporate tax receipts, declines in personal income tax receipts due to lower options-related income, and lower capital gains tax receipts, I would anticipate a shortfall in tax receipts in the range of $50-75 billion relative to the CBO's January projections for 2002, above and beyond the shortfall due to the budgetary costs associated with the recently enacted tax cut legislation.

It is noteworthy that such a shortfall in personal income tax receipts would only partially reverse the positive revenue surprises that have been evident in recent years. Over the past five years, personal income tax receipts have consistently exceeded the CBO's estimates, oftentimes by significant margins. For example, in three of those years, the forecast error was $60 billion or higher. The stock market surge undoubtedly played a large role in these forecast errors. Now that it has reversed course, at least temporarily, this suggests the risk of offsetting forecast errors.

Obviously, if income tax receipts disappoint in 2002, that will also have negative consequences for the long-run budget outlook. But even apart from the 2002 outturn, there are reasons to be concerned that the long-run budget surplus projections are too optimistic. First and foremost, of course, is the fact that the assumptions implicit in CBO's baseline budget projection will be violated. For example, Congress could enact spending measures that cause discretionary outlays to rise at a faster pace than inflation and/or make further changes on the tax side (such as adjustments to the alternative minimum tax) that reduce revenue.

Second, and the focus of the remainder of my testimony, is the risk that the long-term growth rate of the economy could fall short of expectations. As you all know, in recent years productivity growth has risen and this has caused the Congressional Budget Office to raise its long-term growth projections.

Unfortunately, our work suggests that some of that rise in productivity growth is likely to be unsustainable. A portion of the productivity gains was due to the investment boom, which led to a rise in the pace of capital deepening and, thereby, increased the output per hour worked. This can be seen quite clearly in the contrast between the contribution of capital deepening to productivity growth during the 1950-98 period and that of the boom years of 1999-2000. In the earlier period, the contribution to productivity growth from capital deepening averaged 0.7% per year. We estimate that this spiked up to 1.6% per year during 1999 and 2000.

This rise was unsustainable because the investment boom itself could not last. It was based upon profit expectations that were overly optimistic. In essence, firms mistakenly interpreted profits associated with the boom for profits that would be sustainable on a long-term basis. When this error became clear, investment spending collapsed and, with it, the rapid productivity gains evident in 1999 and 2000.

We estimate that the rate of return on capital is consistent with a growth rate of the capital stock of about 3-3 1/2% per year. This compares to a peak growth rate of about 5% in 2000. This decline implies a secular trend for productivity growth of about 2 1/4% per year. This, in turn, implies a potential real GDP growth rate of about 3%.

This is about 0.3% per year below the Congressional Budget Office's current assumption for potential GDP growth of 3.3% per year. If our forecast were realized, this would cut the cumulative 10-year budget surplus by nearly $750 billion over the next 10 years.

The bottom line is this:

The boom of the last few years created a temporary period of climbing profits, soaring equity prices, surging productivity growth, and rapid increases in tax revenue. Now that the boom has ended, all these factors are moving in reverse. The result is likely to be a narrowing of profit margins, disappointing tax receipts from both the corporate and household sectors, and somewhat slower productivity growth. The boom exaggerated the good news associated with the improvement in U.S. economic performance. That suggests that the surprises over the next year or two on the budget are likely to be negative ones as the exuberance wears off.